SELF SERVICE RESET PASSWORD MANAGEMENT
DATABASE REPLICATION GUIDE

TOOLS4EVER
IDENTITY GOVERNANCE & ADMINISTRATION

Contents

1.   Introduction

This document describes how SSRPM can be configured to replicate data to other SSRPM Services through Microsoft SQL Server.

A complete example configuration can be found in the chapter 'Example Configuration'. It contains a step by step guide on how to install SSRPM and SQL Server and how to configure replication.

2.   Scenarios

There are several different scenarios why you want to use multiple SSRPM Services. This chapter describes two possible scenarios.

High Availability
If the machine running the SSRPM service goes down, users will not be able to enroll or reset any more. To solve this problem, SSRPM can be configured to fail over to one or more other SSRPM Services. Whenever the SSRPM User Client Software detects that the SSRPM Service is unavailable, it will automatically connect to another SSRPM Service. In this case, the SSRPM User Client Software will be configured to be able to connect to multiple SSRPM Services.

Multiple sites
If your company has more than one office, it is possible that a user enrolls at one site and wants to reset his password at another even though each site has it's own SSRPM Service. In this case SSRPM and SQL server can be configured to replicate the configuration over a (slow) WAN link.

3.   Replication Requirements

There are several requirements to use SSRPM in a replicating environment:

▪   The SSRPM version must be at least 6.00 build 1030.

▪   Microsoft SQL Server must be installed and configured.

▪   In the GPO, used to distribute the SSRPM Client Software, multiple SSRPM Services must be specified.

4.   Example Configuration

4.1.   Introduction

This chapters describes step by step how to configure SQL Server to replicate the SSRPM database to other SQL Servers. Please note that the configuration described in this chapter is an example configuration. There are several other ways to configure SQL Server which are not discussed in this document. The implementation of this example will be done in three major steps:

1.   *Installing SQL Server* on page 2 In this example we will install an SQL server for every SSRPM Service (two in this case). We will start by installing all of the required SQL Servers.

2.   *Installing the SSRPM Service* on page 2 After the two SQL Servers have been installed, we will install the SSRPM Services.

3.   *Configuring Replication* on page 3 When the previous steps have been completed, we can configure the replication.

After completing these three steps, SSRPM is ready for use. All of the installed SSRPM Services will automatically receive updated information on Enrollment and Reset. This can easily be tested by enrolling a user on one SSRPM Service and viewing the enrolled users on the other SSRPM Service.

Requirements for this example*:
- 2 Windows 2012 machines that are both a member of the same domain.
- Microsoft SQL Server 2014 Standard Edition is installed on both machines.
- Both SQL Servers are configured to use Windows Authentication.
- The SSRPM Service is installed on both machines.
- An Account for the SSRPM Services. (This example uses a domain account that is member of Domain Admins)
- An Account for the SQL Server Agents. (This example uses a domain account that is a member of Domain Users)

*Please note that these requirements are necessary for this example only. SSRPM and SQL Server can be configured in many different ways.

4.2.   Installing SQL Server

In this example Microsoft SQL Server 2014 standard edition is used. Follow the instructions of the wizard and make sure that the authentication mode is set to: 'Windows Authentication Mode'.

The Service Account used for the SQL services is a normal domain account that is a member of Domain Users. The account must be created before starting with the SQL Server installation.

Install an SQL Server for every SSRPM Service. The SQL Server may be installed on the same machine as the SSRPM Service, but it is not required. When finished, continue with the *installation of the SSRPM Services* on page 2.

4.3.   Installing the SSRPM Service

The SSRPM Service can be installed using the Admin Console.

1.   Open the Admin Console.
2.   Go to 'Service Management --> Setup...'.
3.   Click on Next and enter the name of the computer on which the SSRPM Service must be installed.
4.   Click on Next until the following page is displayed:

5.   Enter the name of the service account that must be created or used. Always enter the password for the service account.
6.   Click on next until the following page is displayed:

7.   Click on next. The following page is displayed:

8.   Click on 'Connection String Wizard..' to create a new connection string to the SQL database. This displays the following page:

9.   Select 'Microsoft OLE DB Provider for SQL Server' and click on Next. This will display the following page:

10. Enter the name of the SQL Server and select 'Use Windows NT Integrated security'. It is not required that a database is selected. Click on OK.

11. Click on next until you reach the summary page. Click on Finish. This will install the SSRPM Service and create the SSRPM Database on the SQL Server.

After installing the SSRPM Services on all required machines, continue with the *configuration of the SQL Server Replication* on page 3.

4.4.   Configuring Replication

Replication in SQL Server consists of two parts: A publication and one or more subscriptions to that publication. This chapter first describes how to create a publication and then how to create a subscription to that publication.

Please note that multiple SSRPM Services must be configured in the GPO setting 'SSRPM Service Location' to be able to use the fail over feature. The GPO Distribution Guide describes step by step how to configure the GPO for SSRPM.

4.4.1.   Publication

This chapter describes how to create a publication. A publication is made on the first SQL Server. A subscription should be made on all other SQL Servers.

1.   Open SQL Server Management Studio

2.   Go to Replication --> Local Publications

3.   Right click on Local Publications and select 'new publication...'.

4.   Click on next. The following page is displayed: ***Please note that this page is not always displayed. If the page is not displayed continue to step 8**

5.   Select ''SERVER' will act as its own Distributor; SQL Server will create a distribution database and log'

6.   Click on next. The following page is displayed:

7.   Enter the name of the directory in which the snapshot must be created.

8.   Click on next. The following page is displayed:

9.   Select 'MSSQLSSRM' as the database to replicate and click on next. This will display the publication type page:

10. Select 'Merge Publication' as the type of replication.

11. Click on next until the following page is displayed:

12. Check all tables as displayed in the above picture.

13. Click on next until the following page is displayed:

14. Click on 'Security Settings...'.

15. Select the 'Run under the Server Agent service account' option and click on 'OK'.

16. Click on next. The following page may be displayed:

17. Click on next until the 'Complete the Wizard' page is displayed:

18. Enter a new name for the publication (In this example we used 'SSRPM') and click on finish.

4.4.2.   Subscription

Once the publication is made, subscriptions to that publication can be made on all other SQL Servers.

1. Open SQL Server Management Studio

2. Go to Replication --> Local Subscriptions

3. Right click on Local Subscriptions and select 'new subscription...'.

4. Click on next. The following page is displayed:

5. Select the server which is running the publication made in the previous chapter. Select the publication 'SSRPM'. Click on next to display the following page:

6. Select the option 'Run all agents at the distributor'.

7. Click on next. The following page is displayed:

8. Select the server (Subscriber) that contains the created publication and select the correct Subscription Database ('MSSQLSSRPM')

9. Click on next. The following page is displayed:

10. Click on the browse button. The following dialog is displayed:

11. Select the 'Run under the SQL Server Agent service account' option and click on OK.

12. Click on next until the following page is displayed:

13. Set the Agent Schedule to 'Run Continuously'.

14. Click on next until the 'Complete the Wizard' page is displayed.

15. Click on Finish.

After creating both the publication and the subscription, the replication is in place. Users enrolled at one location can also reset their password at another location. This can be easily tested by enrolling a user at one location and viewing the enrolled users at the other location.

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